



Growth Mindset to Motivate Peer Educators and Students



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"Everyone should own this book."
—CHIP HEATH & DAN HEATH, authors of *Made to Stick* and *Switch*

mindset

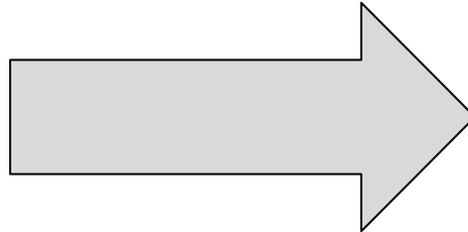
THE NEW PSYCHOLOGY OF SUCCESS

HOW WE CAN
LEARN TO FULFILL
OUR POTENTIAL

- *parenting
- *business
- *school
- *relationships

"Will prove to be
one of the most
influential books ever
about motivation."
—PO BRONSON, author
of *NurtureShock*

CAROL S. DWECK, Ph.D.



Share my Learning With you (*I'm not an expert*)

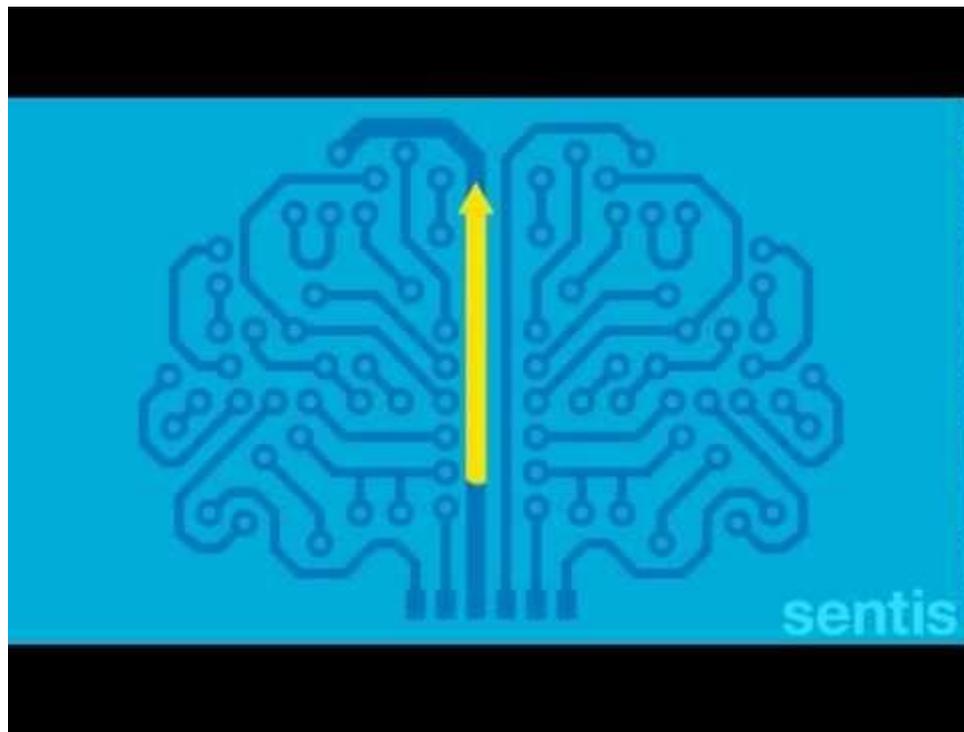
- I. What is Neuroplasticity? What is the growth mindset?
 - A. Capable of Learning throughout life and becoming better at learning

- II. Growth Mindset Correlates to Learning Outcomes
 - A. Those who believe in neuroplasticity and, as a result, work hard and utilize effective learning strategies tend to be more academically successful

- III. We can influence others to have a growth mindset
 - A. Through our feedback

I. What is Neuroplasticity? What is the growth mindset?

Neuroplasticity



Through effortful learning, we construct a brain anatomy that will be more effective at learning in the future

Fixed and Growth Mindsets

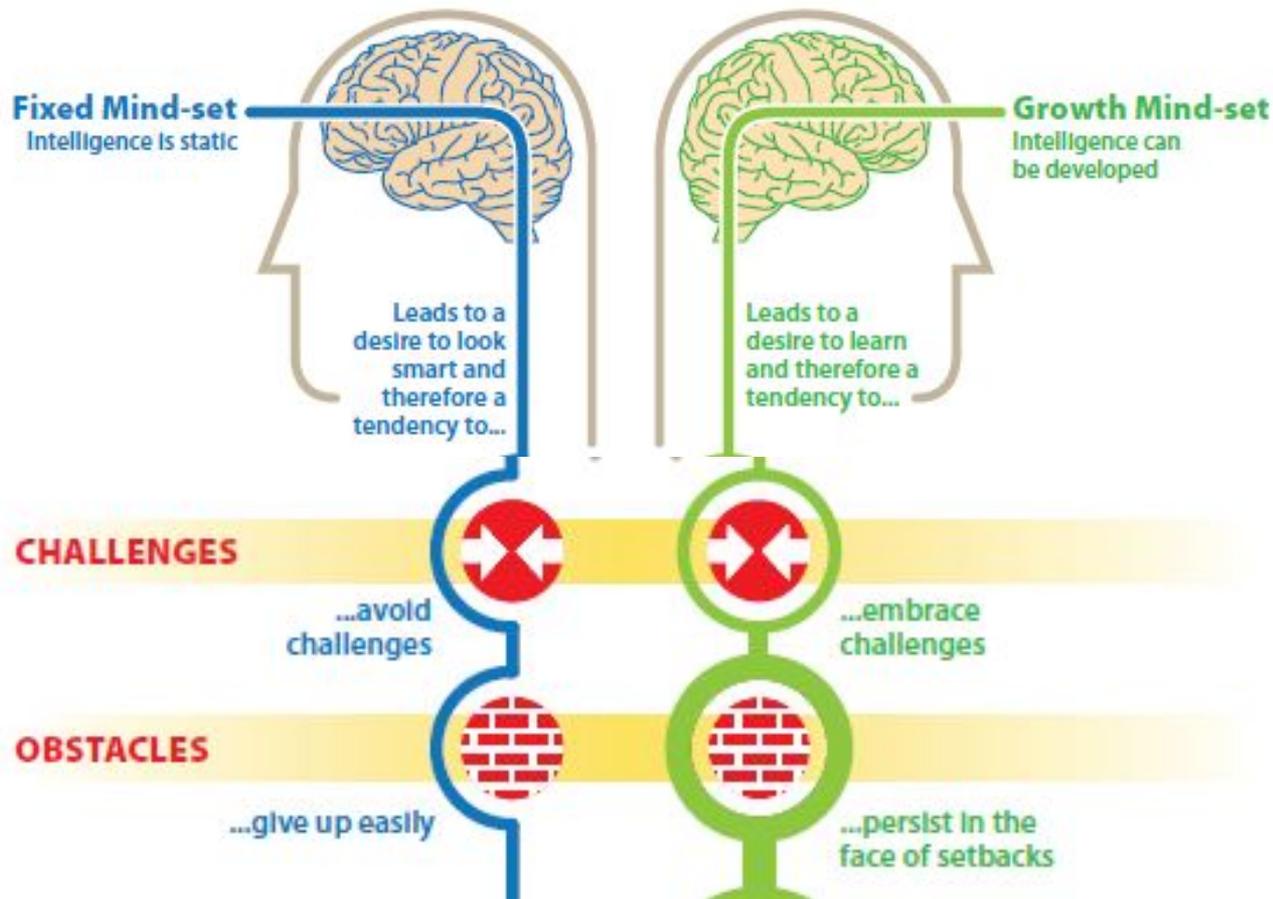


The Mindsets

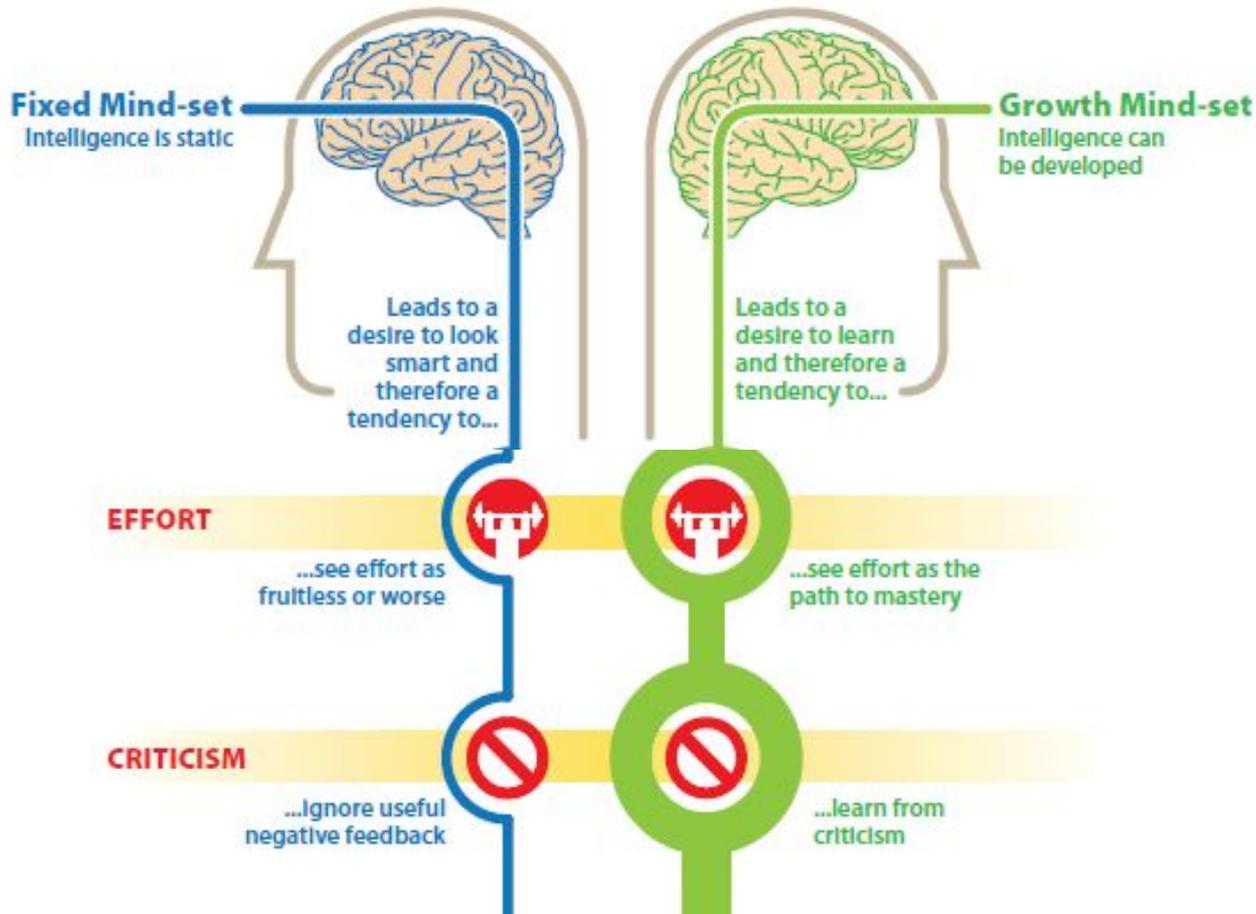
Fixed/Entity

Growth/Incremental

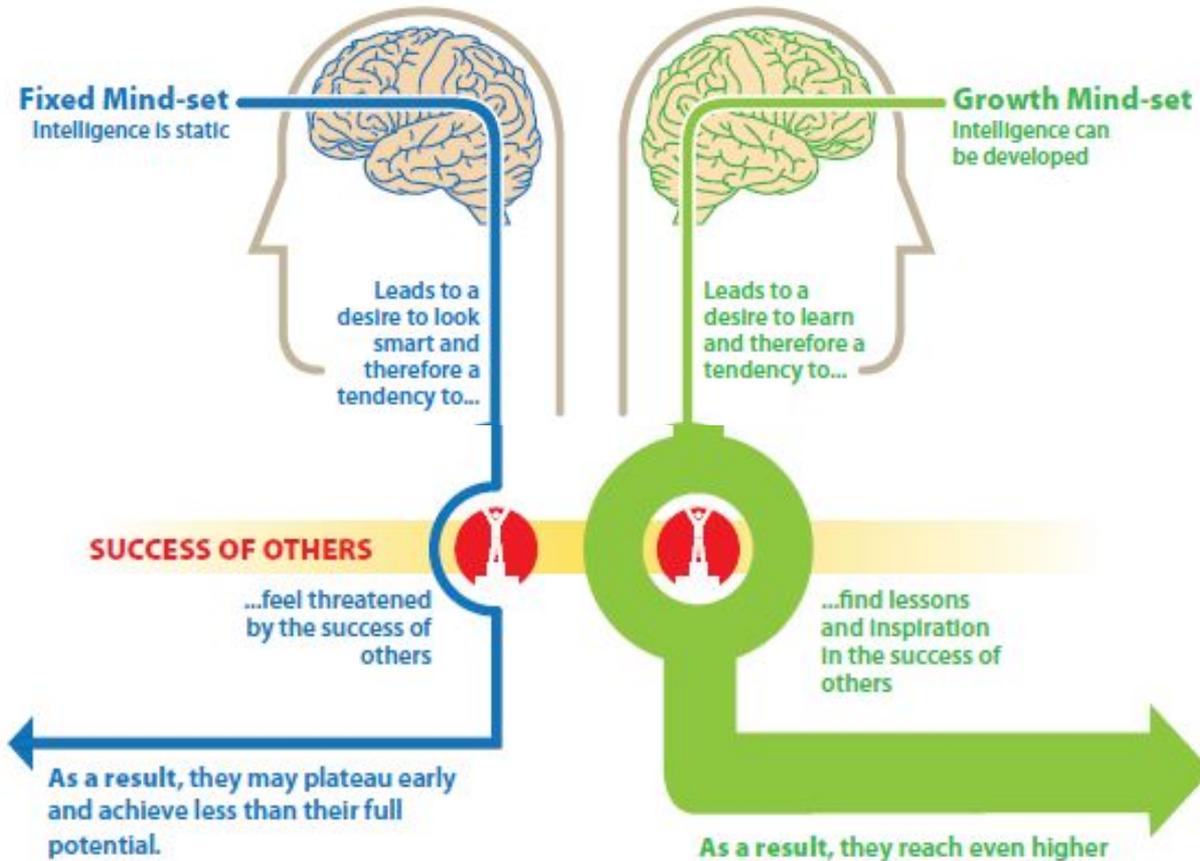
Two Mindsets



Two Mindsets



Two Mindsets



Doesn't one of these sound like more fun?

Exercise #1: Think to yourself/write down-

Please provide a recent example of a situation in which you displayed a fixed-mindset orientation

- I; you gave up quickly in the face of obstacles or challenges because you did not think you could overcome them, or you minimized the effort you put in because you did not want to risk exposure or embarrassment

Please provide a recent example of a situation in which you displayed a growth-mindset orientation

- I; Sought to learn from a mistake or overcome a challenge by improving your abilities

What do you think may have caused you to respond differently to these two situations?

II. Growth Mindset Correlates to Academic Success

Child Development, January/February 2007, Volume 78, Number 1, Pages 246–263

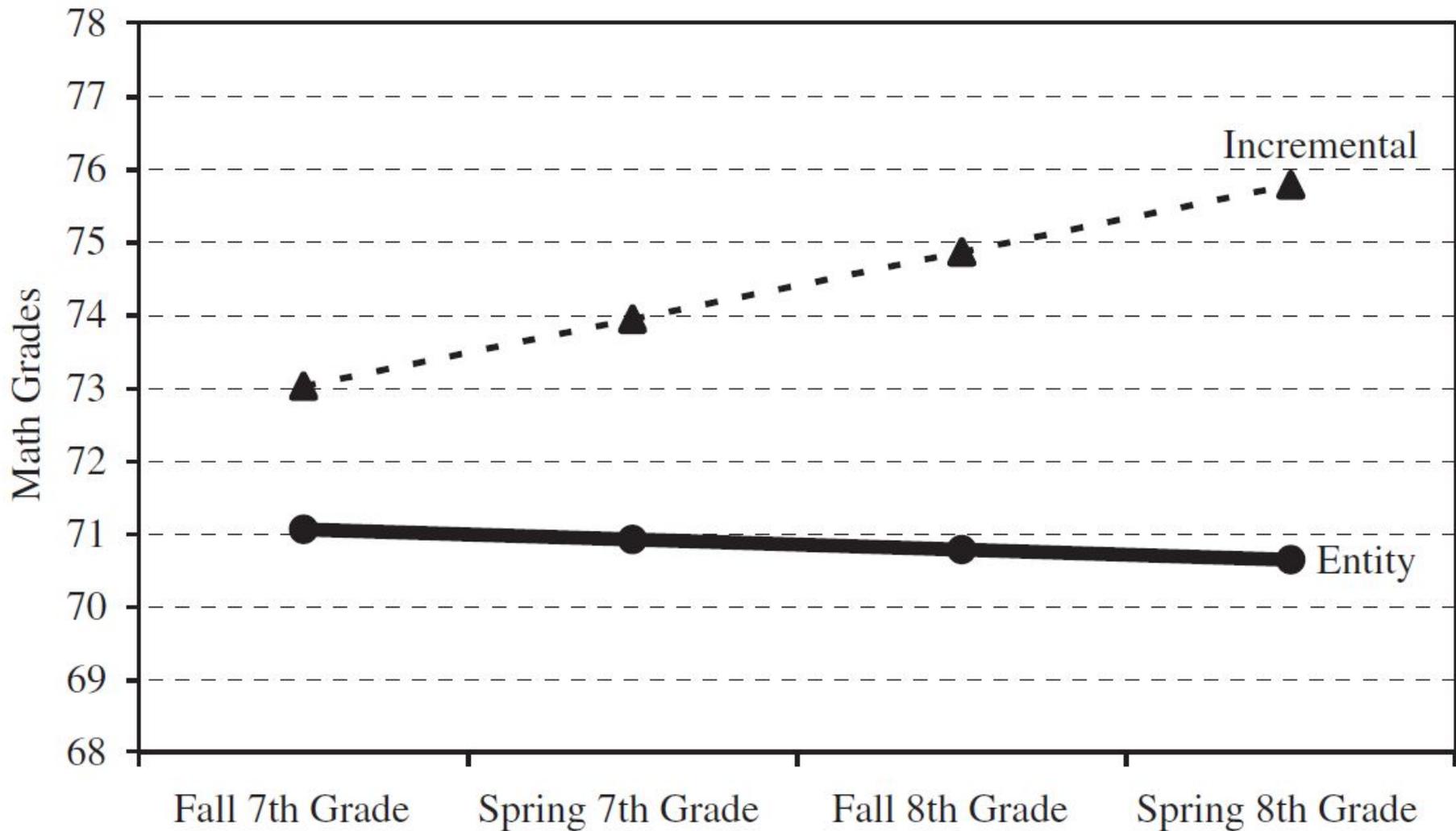
Implicit Theories of Intelligence Predict Achievement Across an Adolescent Transition: A Longitudinal Study and an Intervention

Lisa S. Blackwell
Columbia University

Kali H. Trzesniewski and
Carol Sorich Dweck
Stanford University

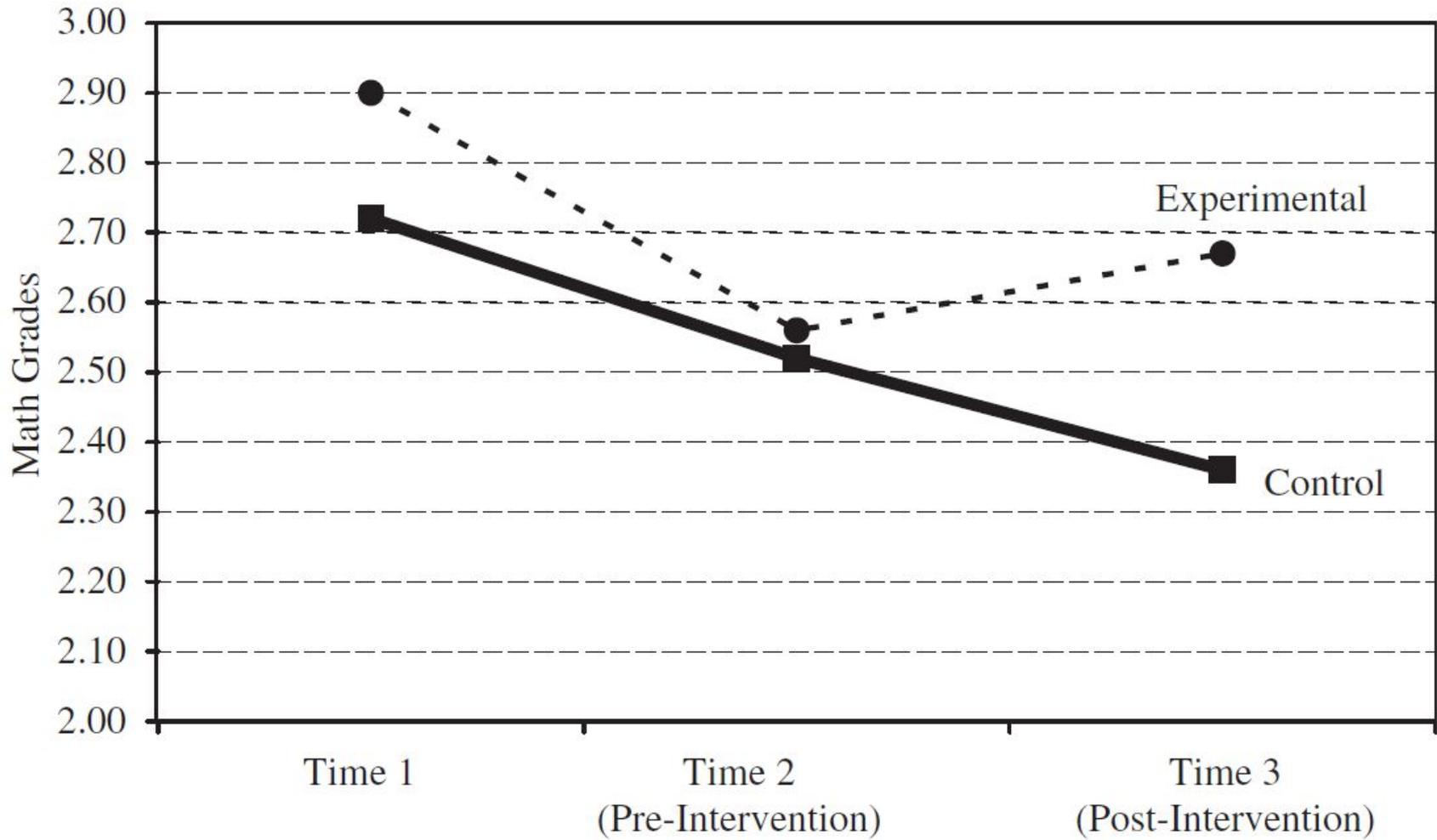
Outline of First Study

- Four successive years of incoming middle school students (373 total)
- Diversity: ethnicity, income, prior success
- Their mindsets were assessed upon entry
- Math scores tracked through middle school
 - Corrected for prior math ability



Outline of Second Study

- 99 Incoming 7th graders whose grades had been decreasing
- Intervention: Teach $\frac{1}{2}$ of them the science + theory of the Growth Mindset



Summary

1. Students with the growth mindset earned better grades than those with the fixed mindset
2. When students learned the growth mindset, their grades improved

Why did the Growth Mindset Students do Better?

Students with these beliefs were less likely to attribute a potential failure to lack of ability, and more likely to say they would invest more effort or change strategy in response than were students who held an entity theory.

III. Strategic Feedback Influences Students' Mindsets

Praise for Intelligence Can Undermine Children's Motivation and Performance

Claudia M. Mueller and Carol S. Dweck
Columbia University

Praise for Intelligence

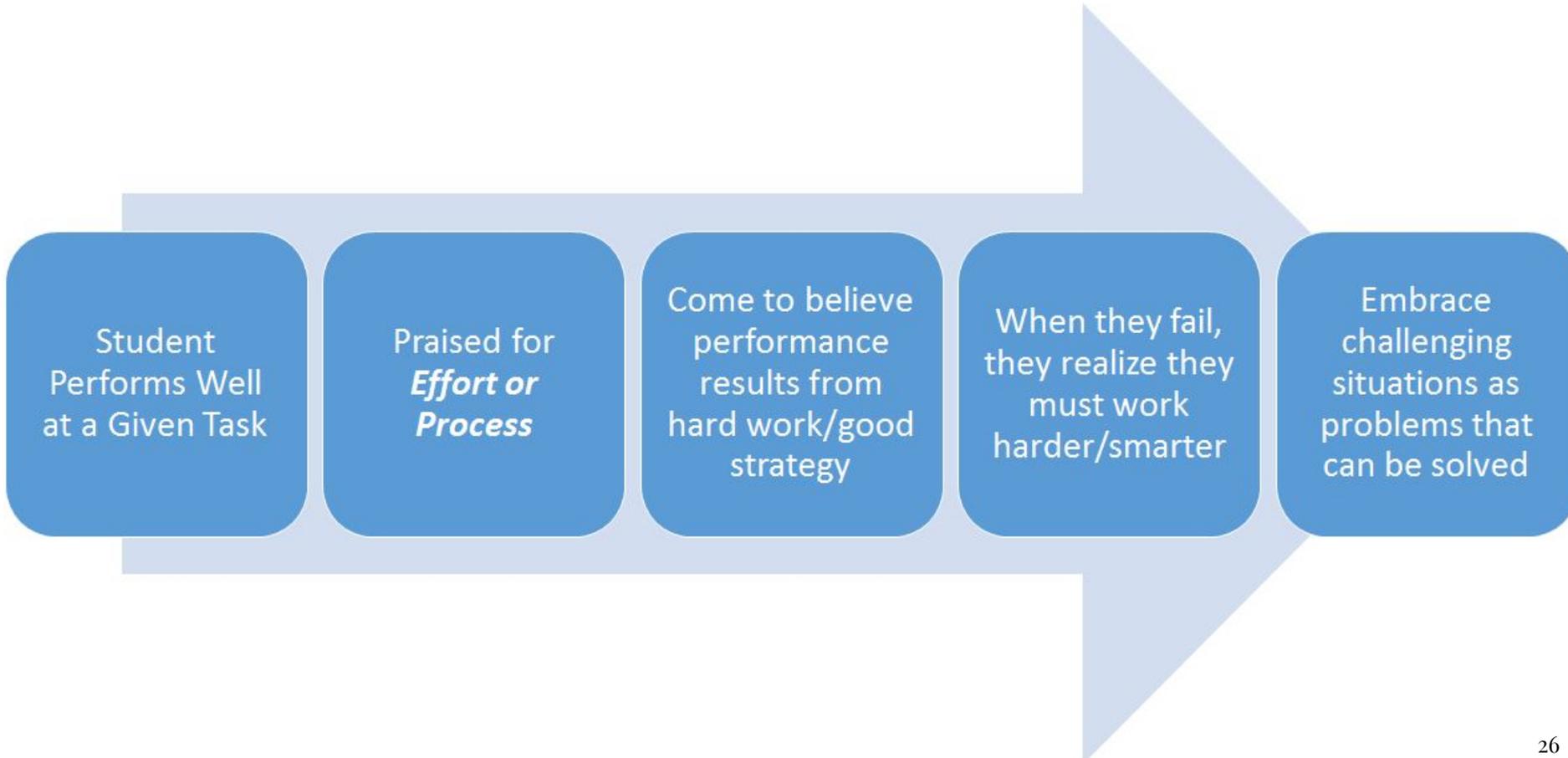
we propose that praise for their intelligence, *even when it follows a genuine success*, teaches children that they can measure how smart they are from how well they do. Therefore, if they subsequently do poorly, children may remeasure their ability from this low performance.



Vs. Praise for Process/Effort

First, effort-related praise may lead children to focus on the process of their work and the possibilities for learning and improvement that hard work may offer. Because of this emphasis on their efforts, children may feel able to focus on the development of their skills through the mastery of new material. In

Second, children praised for their hard work may learn to attribute their performance to effort, which can vary in amount, rather than to a stable ability. Thus, they will interpret subsequent poor performance as indicating a temporary lapse in effort rather than as a deficit in intelligence. Attributions that emphasize effort have been correlated with achievement motivation



Student
Performs Well
at a Given Task

Praised for
*Effort or
Process*

Come to believe
performance
results from
hard work/good
strategy

When they fail,
they realize they
must work
harder/smarter

Embrace
challenging
situations as
problems that
can be solved

The Experimental Group

- 128 Students
 - 51% from large northeastern city/49% from public school in a small Midwestern town
 - 50% Caucasian, 19% African American, 31% Hispanic

First Component

- All students were given a 10 question medium-difficulty problem set

All children were told that they had performed well on this problem set: “Wow, you did very well on these problems. You got [number of problems] right. That’s a really high score.” No matter what their actual score, all children were told that they had solved at least 80% of the problems that they answered.

Some children ($n = 41$) were praised for their ability after the initial positive feedback: “You must be smart at these problems.” Some children ($n = 41$) were praised for their effort after the initial positive feedback: “You must have worked hard at these problems.” The remaining children ($n = 46$) were in the control condition and received no additional feedback.

After receiving praise, students had four options about what problem set to do next

Three of the choices represented variations of a performance goal in that they focused on the display of ability: “problems that aren’t too hard, so I don’t get many wrong,” “problems that are pretty easy, so I’ll do well,” and “problems that I’m pretty good at, so I can show that I’m smart.” The fourth choice, “problems that I’ll learn a lot from, even if I won’t look so smart,” represented a learning goal in that it

Their Choices

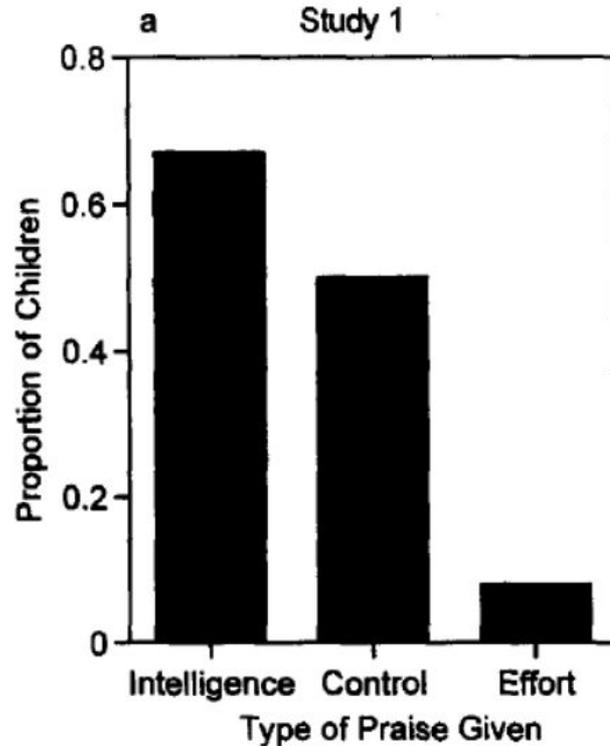


Figure 1. Proportion of children who selected performance (rather than learning) goals plotted as a function of the type of praise given.

Second Component

were given 4 min to work on a more difficult set of 10 progressive matrices. After 4 min or the completion of all 10 problems, they were informed that they had performed poorly (“a lot worse”) on them. Children in all three groups were told that they had solved no more than 50% of the problems that they answered.

Results of Second Component

- Students who had been praised for intelligence were more likely to attribute their lack of success to a lack of ability
- Students who had been praised for effort were more likely to believe that they had done poorly because they hadn't tried hard enough

Third Component

They subsequently were given 4 min to work on a third set of progressive matrices equal to the first set in level of difficulty. This process yielded a measure of postfailure performance.

Results

Although the third problem set was equally difficult to the first set...

- The scores of students in the “intelligence praise” group **dropped** by 0.92 points on average (*Less resilient to failure*)
- The scores of students in the “effort praise” group raised by 1.21 points on average

Empowering

We don't all have to be motivational speakers;
we can still motivate students!

CAUTION: False Growth Mindset

- ~~“Good Try...”~~
- Keep it real: Effort and/or Strategy

Group Analysis Scenario 1

A student whom you work with frequently walks in with a smile on their face. They say “Check this out!” and show you a test they just got back. They scored a 97 on it!

Effort-oriented feedback: *Wow! That’s awesome! I’ve seen you working hard in here every day for the past two weeks. That persistence seems to have helped you learn a great deal of material.*

Strategy-oriented feedback: *I remember that you focused really hard on learning to solve the problems on the practice test that the professor provided. Did those problems show up on the test? Were you ready for them?*

Group Analysis Scenario 2

A student whom you work with frequently walks in with a sour look on their face. They say “I bombed it!” and show you a test they just got back. The scored a 67 on it!

Effort-oriented feedback: *It sounds like you didn't learn the material as well as you hoped. How much time did you spend studying for this test? Do you think that was enough?*

Strategy-oriented feedback: *It sounds like you didn't learn the material as well as you hoped. Tell me about how you studied for this test. Frequently, when students don't get their goal scores, it's because they studied the wrong way for tests like this.*

Partner Analysis Scenario

Scenario

You are working with a student on a long math problem. They work through it for 5 or 10 minutes, and it looks like they're doing most of the procedures correctly, but they don't get the correct answer. They say, "Ugghh! These are impossible!"

Scenario

A student is looking at a professor's feedback on their essay. They say, "The --- professor says that my topic sentences need to connect to my thesis ---statement. I don't understand, I thought they did!" The tutor can see that the topic sentences do not clearly connect to thesis.

Feedback you would use in these scenarios?

Scenario

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Scenario

A student is looking at a professor's feedback on their essay. They say, "The --- professor says that my topic sentences need to connect to my thesis ---statement. I don't understand, I thought they did!" The tutor can see that the topic sentences do not clearly connect to thesis.

Consider your Learning Center

Consider your learning center. Do tutors promote the growth mindset? Please provide examples of how they do/do not promote the growth mindset. Do you want to change this? If so, how could you go about making this change?

Thank you!

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